

sequentially forming a p-layer, an i-layer and an n-layer comprising amorphous silicon on the first electrode layer,

forming a second electrode layer on the n-layer,

in order to form the layers comprising amorphous silicon, applying first and second high frequency voltages between the first pair of electrodes and between the second pair of electrodes, respectively, to cause plasma discharge, the first and second high frequency voltages being modulated in accordance with first and second pulse waves, respectively, wherein ON periods of the first and second pulse waves are controlled so as not to overlap or coincide with each other, and wherein ON periods of the first and second pulse waves are shorter than corresponding OFF periods, and

wherein the i-layer is formed by a plasma CVD method employing plasma discharge caused by application of a pulse-modulated high frequency voltage having a pulse ON time of not longer than 10 μ sec and a duty ratio of not higher than 20% to improve a photo-electric conversion efficiency of the solar cell.

6. (Amended) A method of making a solar cell, the method comprising:

forming a layer comprising amorphous silicon,

wherein the layer comprising amorphous silicon is formed by a plasma CVD method comprising employing plasma discharge caused by application of a pulse-modulated high frequency voltage having a pulse ON time of not longer than 10 μ sec and a duty ratio of a pulse-modulated high frequency voltage used in said forming is not higher than 20% to improve a photo-electric conversion efficiency of the solar cell, and

in order to form the layer comprising amorphous silicon, applying first and second high frequency voltages between a first pair of electrodes and between a second pair of electrodes, respectively, to cause plasma discharge, the first and second high frequency voltages being modulated in accordance with first and second pulse waves, respectively, wherein ON periods of the first and second pulse waves are controlled so as not to overlap or coincide with each other, and wherein ON periods of the first and second pulse waves are shorter than corresponding OFF periods.

Please add the following new claims:

9. (New) The method of claim 1, wherein the ON periods of the first and second waves are spaced apart to provide OFF periods in between.

10. (New) The method of claim 6, wherein the ON periods of the first and second waves are spaced apart to provide OFF periods in between.

REMARKS

This is in response to the Office Action dated April 10, 2003. Claims 2 and 7 have been canceled. New claims 9-10 have been added. Thus, claims 1, 6 and 8-10 are now pending. Attached hereto is a marked-up version of the changes made to the claim(s) by the current amendment. The attached page(s) is captioned "Version With Markings To Show Changes Made."

Claim 6